Figure 1

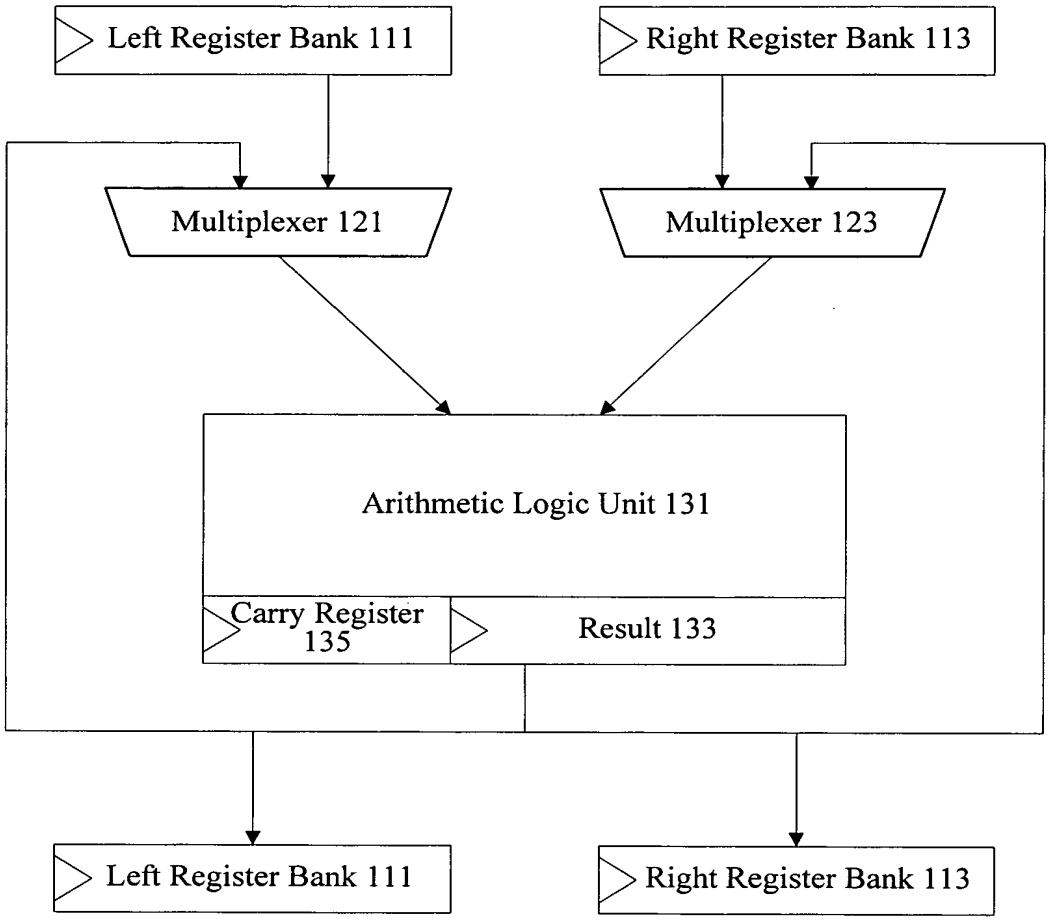

Left Register Bank 111
Right Register Bank 113
Multiplexer 121
Multiplexer 123
Arithmetic Logic Unit 131
Carry Register 135
Result 133
Left Register Bank 111
Right Register Bank 113

Figure 2

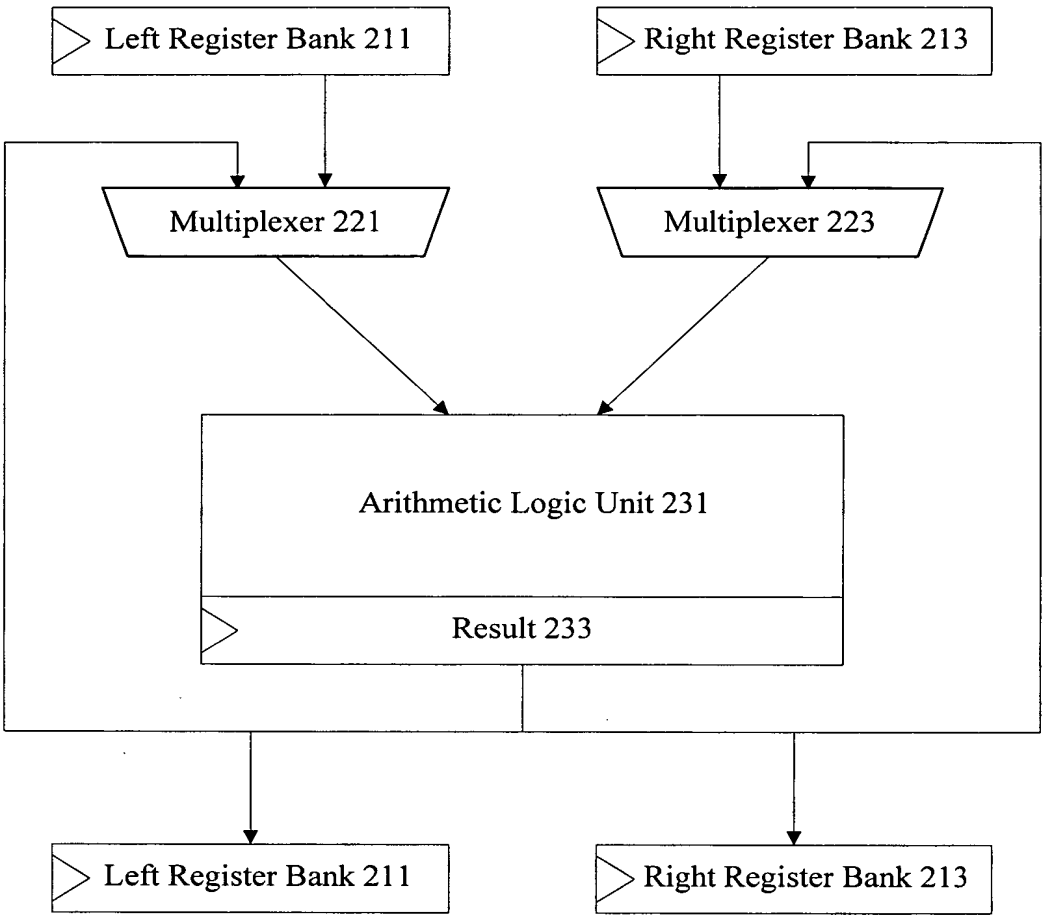

Left Register Bank 211
Right Register Bank 213
Multiplexer 221
Multiplexer 223
Arithmetic Logic Unit 231
Result 233
Left Register Bank 211
Right Register Bank 213

Figure 3

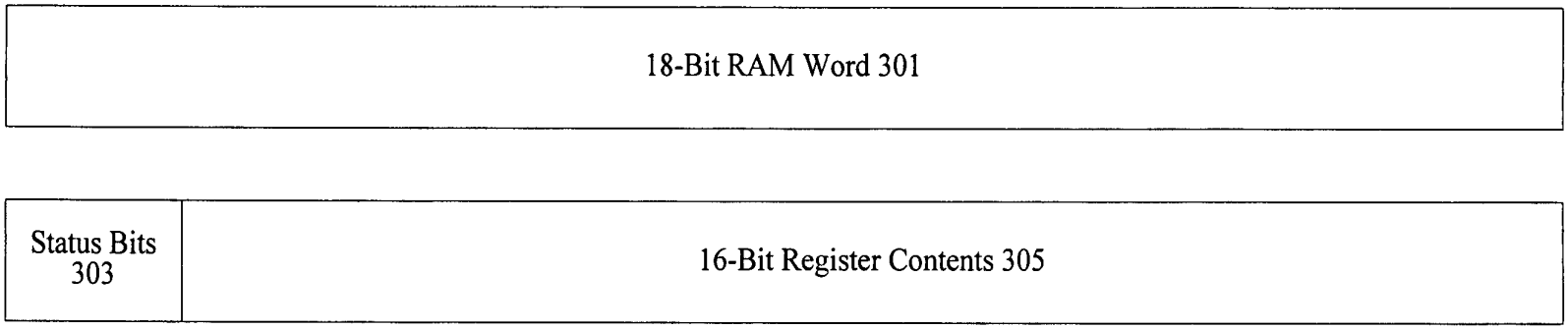

18-Bit RAM Word 301
Status Bits 303
16-Bit Register Contents 305

Figure 4

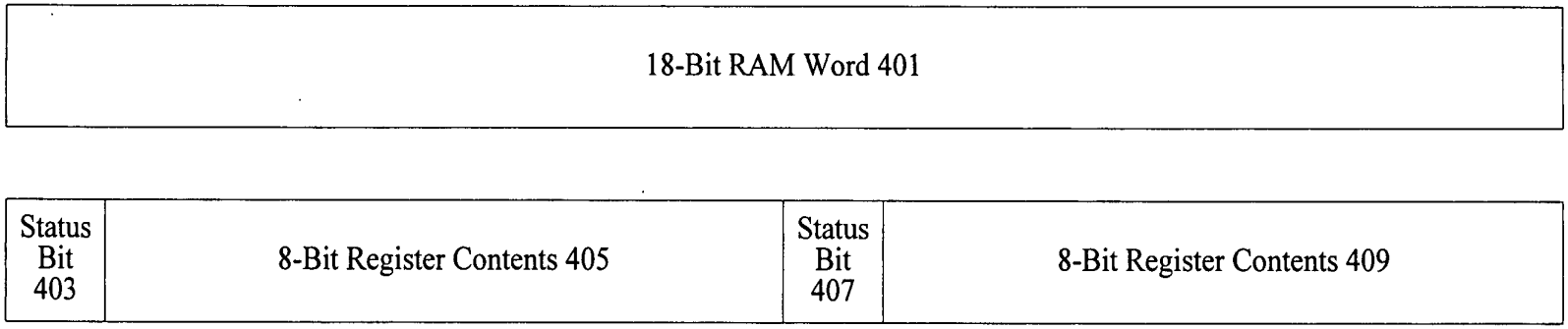

18-Bit RAM Word 401
Status Bit 403
8-Bit Register Contents 405
Status Bit 407
8-Bit Register Contents 409

Figure 5

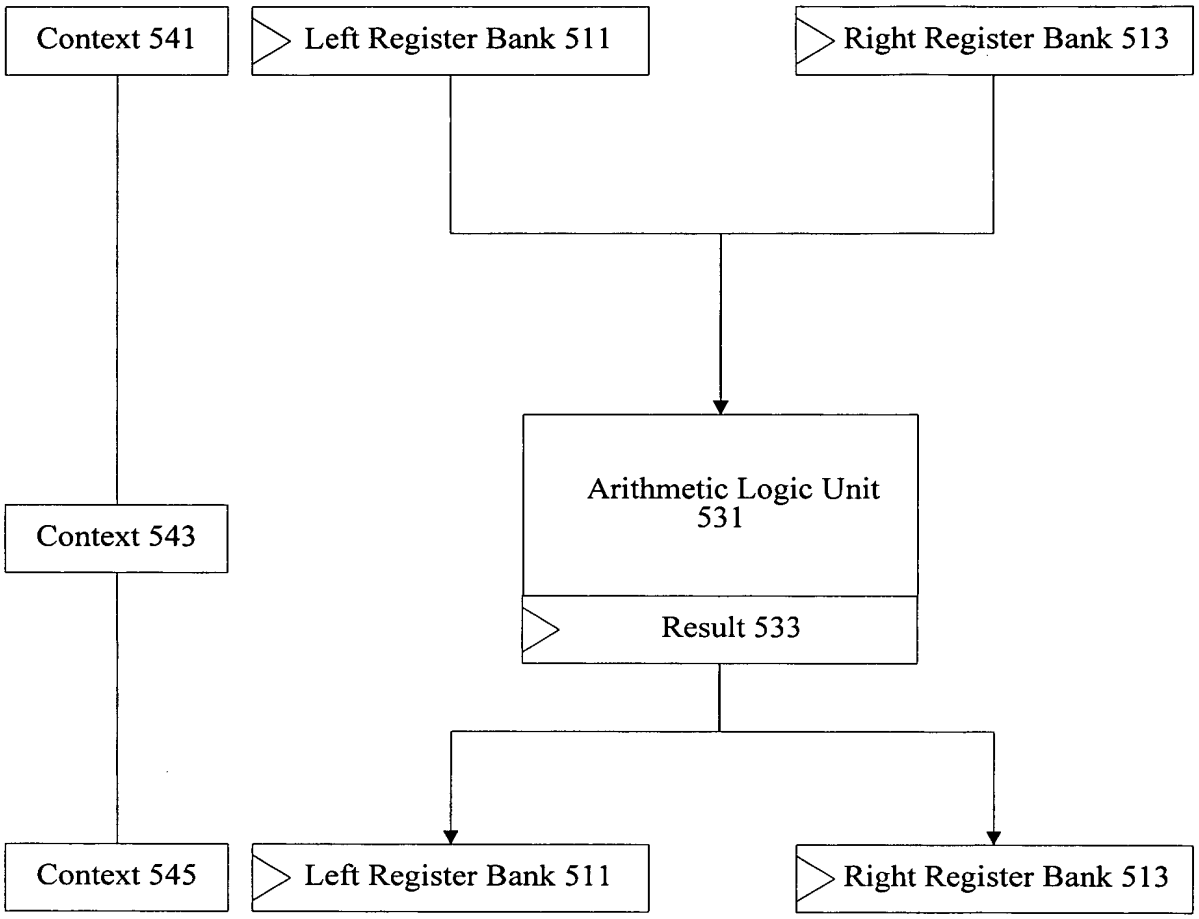

Context 541
Left Register Bank 511
Right Register Bank 513
Arithmetic Logic Unit
531
Context 543
Result 533
Context 545
Left Register Bank 511
Right Register Bank 513

Figure 6

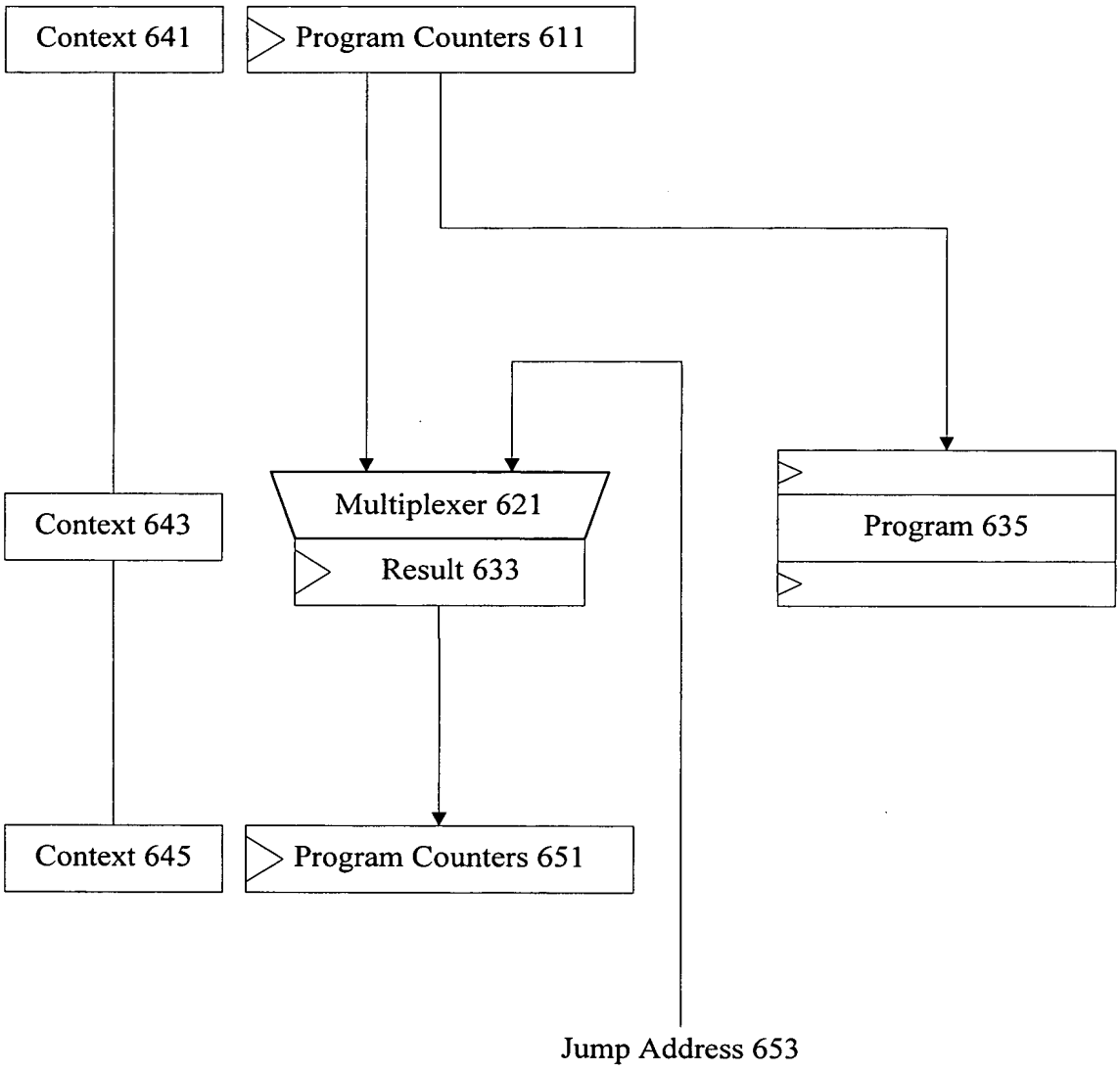
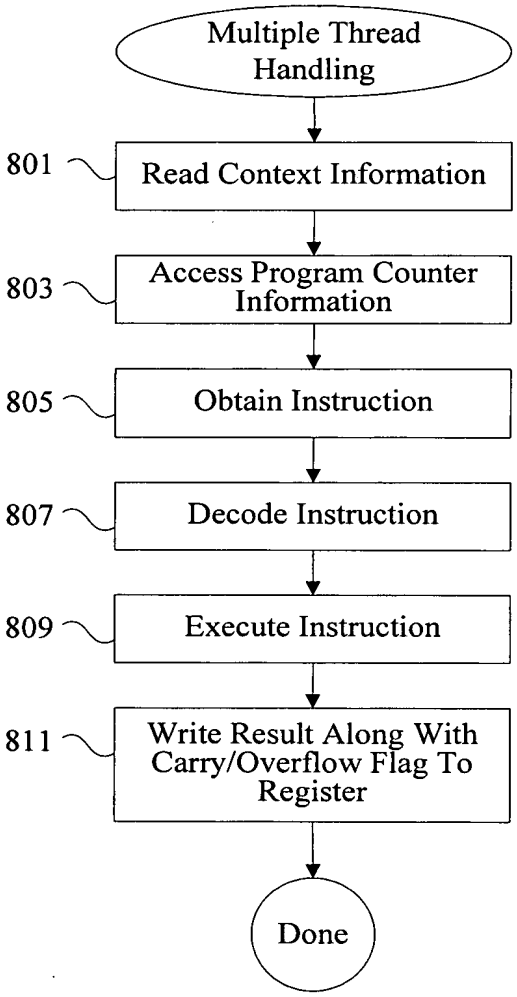

Context 641
Program Counters 611
Multiplexer 621
Result 633
Program 635
Context 643
Context 645
Program Counters 651
Jump Address 653

Figure 7

Context Identifier 701	Register Address 703	Register Data 705
0 0	0 0 0 0 0 0	0 1 0 0 1 0 1 1 1 0 1 0 0 1 0 0
0 0	0 0 0 0 0 1	0 1 0 0 1 1 1 0 0 0 1 0 0 1 0 1
0 0	0 0 0 0 1 0	1 1 1 0 1 0 1 1 1 0 1 0 0 1 1 1
. . .	. . .	. . .
0 0	1 1 1 1 1 1	0 0 0 0 1 0 1 1 1 0 1 1 0 1 0 1
0 1	0 0 0 0 0 0	0 1 0 0 1 0 1 0 1 0 1 0 0 1 0 0
. . .	. . .	. . .
0 1	1 1 1 1 1 1	0 0 0 0 1 0 1 0 0 1 0 1 1 0 1 0
1 0	0 0 0 0 0 0	0 1 0 0 1 0 1 1 1 0 1 0 0 1 0 0
. . .	. . .	. . .
1 0	1 1 1 1 1 1	0 0 0 1 0 1 0 0 0 0 1 0 1 0 0 1
1 1	0 0 0 0 0 0	1 1 1 1 0 0 0 0 1 0 1 0 0 1 0 0
. . .	. . .	. . .
1 1	1 1 1 1 1 1	0 1 0 0 1 0 1 1 0 1 0 0 1 0 1 1

Figure 8


Multiple Thread Handling
801
Read Context Information
803
Access Program Counter Information
805
Obtain Instruction
807
Decode Instruction
809
Execute Instruction
811
Write Result Along With Carry/Overflow Flag To Register
Done

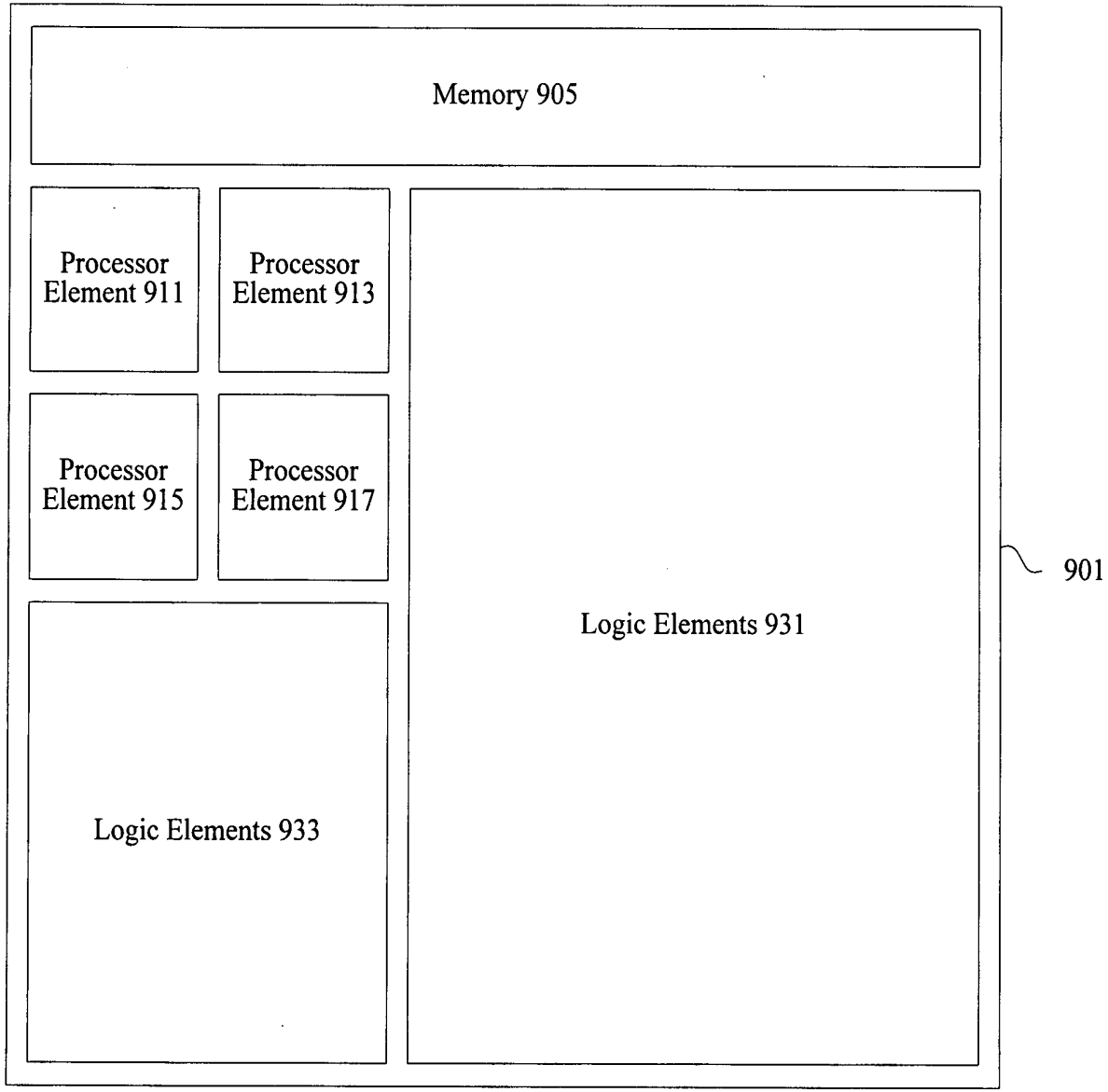

Memory 905
Processor Element 911
Processor Element 913
Processor Element 915
Processor Element 917
Logic Elements 933
Logic Elements 931
901

Figure 9

Figure 10

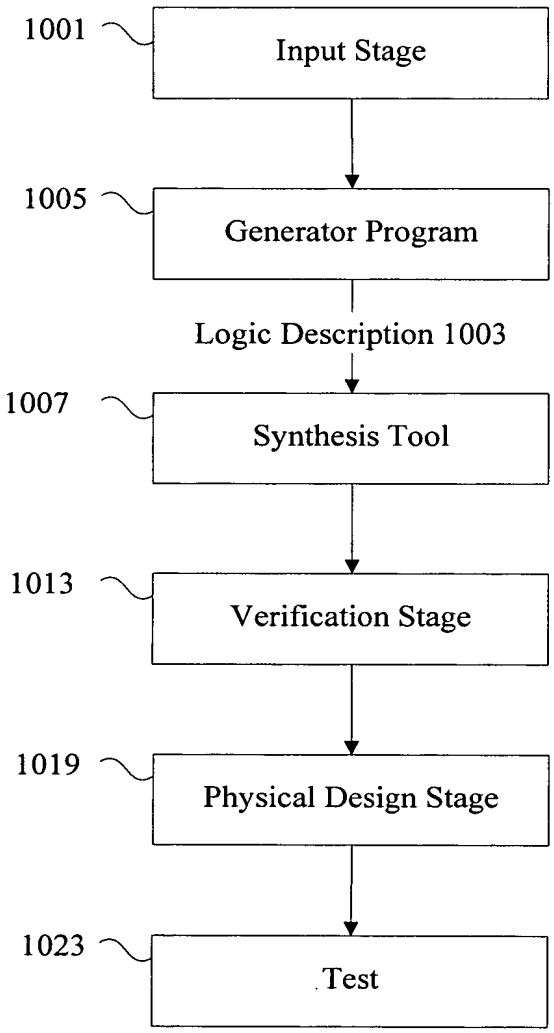
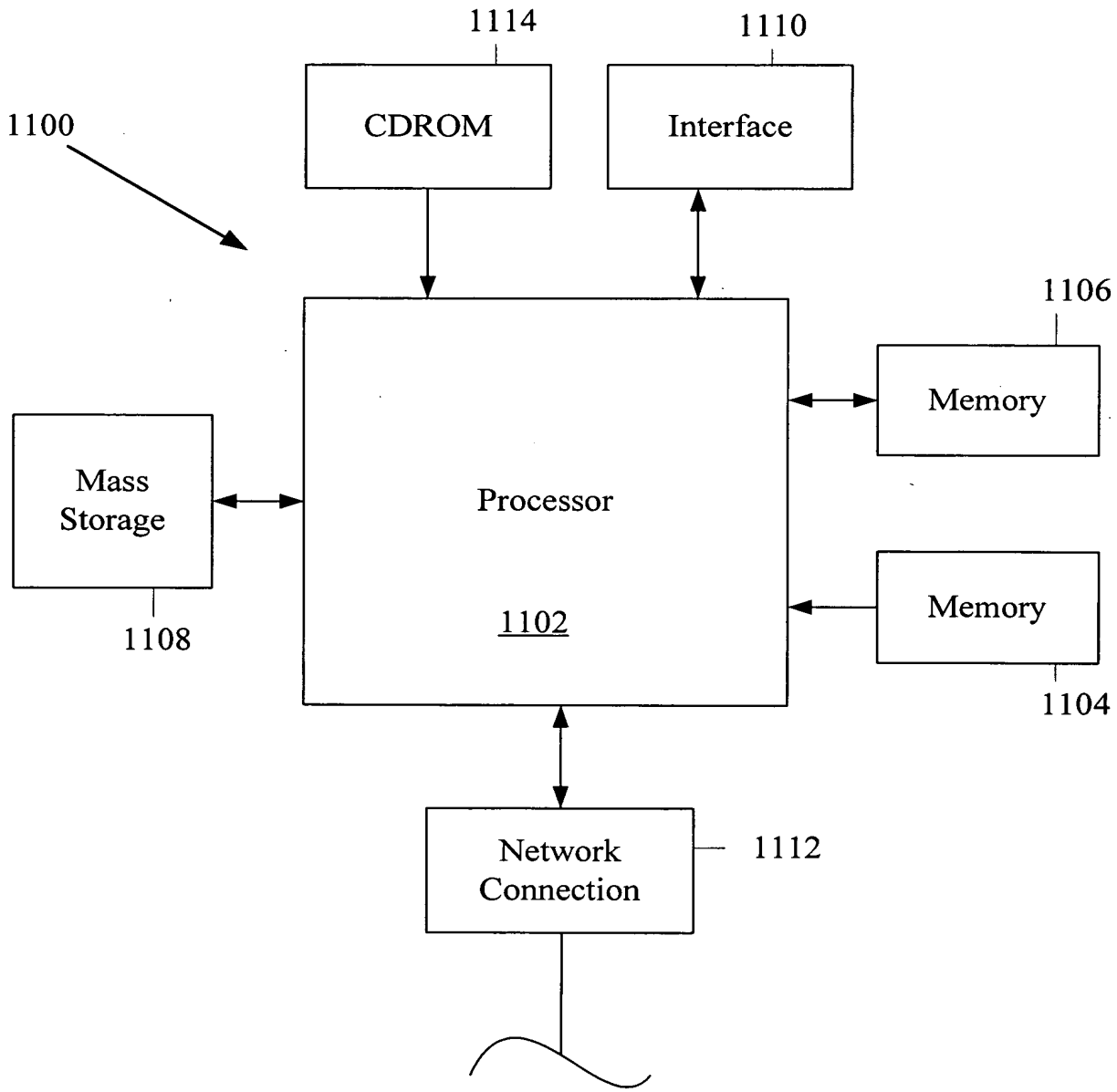

1001
Input Stage
1005
Generator Program
Logic Description 1003
1007
Synthesis Tool
1013
Verification Stage
1019
Physical Design Stage
1023
Test

Figure 11


1114
1110
1100
CDROM
Interface
1106
Memory
Mass Storage
Processor
1102
Memory
1108
1104
Network Connection
1112